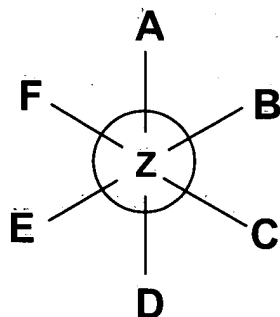


Abstract

The invention provides reporter compounds based on squaric, croconic, and/or rhodizonic acid, among others, reactive intermediates used to synthesize the reporter compounds, and methods of synthesizing and using the reporter compounds, among
5 others.

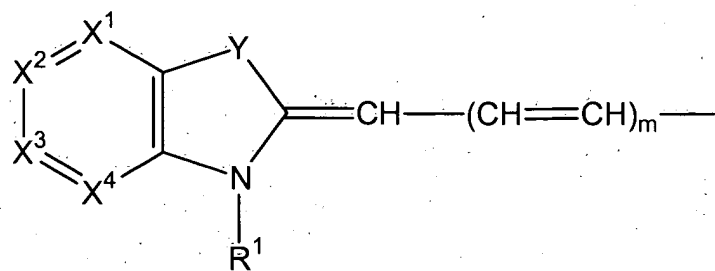
The reporter compounds relate generally to the following structure:



10 Here, Z is a four, five, or six-member aromatic ring, and A, B, C, D, E, and F are substituents of Z, where F is absent when Z is a five-member ring, and where E and F are absent when Z is a four-member ring.

A, B, C, D, E, and F are selected from a variety of elements and groups, including but not necessarily limited to O, S, Se, Te, $C(R^a)(R^b)$, $N-R^c$, $N(R^d)(R^e)$, W^1 , and
15 W^2 .

W¹



and

5

W²

